

ABSTRACT OF DISCLOSURE

A channel equalizer of a single carrier receiver of improved equalization efficiency includes a feed-forward filter that removes a pre-ghost from respective symbols of a broadcasting signal, a feedback filter that removes a post-ghost from the respective symbols of the broadcasting signal, an adder that adds the pre-ghost removed symbols with the post-ghost removed symbols, a level decision unit that determines a level of the symbols added at the adder with reference to predetermined level data and then feeds back the determined level to the feedback filter, a trellis decoder that performs trellis decoding with respect to the symbols added at the adder and has a whole decoding depth as N (N =natural number), and a whole length of a trace back delay as $N \times K$ (K =natural number), an error calculator that calculates an error value between the symbols added at the adder and the level determined at the level decision unit, and a trellis control unit that controls the trellis decoder so that a plurality of decoded symbols output from the trellis decoder can be input to the feedback filter in correspondence to the error obtained at the error calculator.